REMARKS/ARGUMENTS

This amendment is in response to the Office Action mailed October 23, 2003. Applicants would like to thank the Examiner for a timely and thorough review of the above-referenced patent application. Independent Claims 6 and 13 have been amended to more clearly define the invention, as explained more fully below. It is respectfully submitted that in light of the arguments and claim amendments, the application is now in condition for allowance.

Election/Restriction

Claims 1-5 have been withdrawn as being drawn to a nonelected invention.

Priority

In the Office Action, the Examiner stated an English translation of the Provisional Application 60/290,362, filed 5/11/2001 and upon which priority is claimed, was not filed. Applicants respectfully submit that an English translation of the application was filed with the nonprovisional application on 2/19/2002. A copy of the postcard receipt and the English translation as filed are enclosed herein. Accordingly, Applicants respectfully submit that the claim for domestic priority under 35 U.S.C. 119(e) is adequately supported by the previously filed English translation.

Rejections Under 35 U.S.C. § 102(b) – Rahkomaa

The Office Action rejected Claims 6-7 and 13-15 under 35 U.S.C. § 102(b) as being anticipated by WIPO Publication No. 99/64666 to Rahkomaa et al. According to the Office Action, the Rahkomaa '666 publication discloses equipment in a paper machine for the mixing of fresh stock and water for dilution of the fresh stock. The equipment includes a pipe 11 bringing the water and a pipe 13 bringing fresh stock and entering from outside into the center of the pipe 11, so that the fresh water is mixed with the stock. Mixing area K is created and includes form pieces that are located on the inner periphery of the pipe 11 and are of a defined

surface and extend a distance toward the middle of the pipe for creating turbulence in the mixing area. However, Applicants respectfully submit that the Rahkomaa '666 publication does not disclose a mixer with one or more feed openings provided on the inner surface of the mixing zone, as claimed in independent Claims 6 and 13.

The Rahkomaa '666 publication discloses pipes 12 and/or 13 that are passed coaxially into the interior of the pipe 11 to define feed openings in the center of the pipe 11. The feed openings of the Rahkomaa '666 publication are defined by the terminating end of the pipes 12 and/or 13 and are not provided on the inside surface of the pipe 11 or on the wedge parts a_1, a_2, ... Independent Claims 6 and 13 claim feed openings on the inner surface of the mixing zone, wherein the inner surface of the mixing zone is defined by the inner periphery of the tube and the control surfaces of the form parts. The Rahkomaa '666 publication does not disclose or suggest feed openings on the inside wall of the pipe 11 or on the wedge parts a_1, a_2, ... and thus does not anticipate independent Claims 6 and 13.

Therefore, Claims 6-7 and 13-15 are not anticipated by the Rahkomaa '666 publication. Accordingly, Applicants respectfully submit that the rejection of Claims 6-7 and 13-15 should be withdrawn.

Rejections Under 35 U.S.C. § 102(b) - Fredriksson

The Office Action rejected Claims 6-8 and 11-12 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,861,165 to Fredriksson et al. To the extent that this rejection would be applied against the claims as amended, Applicants respectfully traverse.

The Fredriksson '165 patent discloses an apparatus that includes a supply pipe 10 through which fiber stock slurry enters mixing zone 13 of the tube 20. Injected from the outside via pipe 19 is a gas or fluid to mix with the slurry. The mixing zone is made of a series of modules that protrude from the tubular wall 20 of the mixer into the center of the mixing zone. The location of the modules 21 can be adjusted and the number of modules may vary depending on the desired degree of mixing. The modules comprise surfaces 24 and 27 with lengths, surfaces, and relative angles that can be adjusted. However, the Fredriksson '165 patent discloses a supply pipe that is before, or axially forward of relative to the flow direction, the modules in the

direction of the slurry flow and does not disclose or suggest providing feed openings that are at or after the front edge of the modules.

Claims 6 and 13 have been amended to include the recitation that "the first of the one or more feed openings for supplying the second flow being located at or after a front edge of the first form part in the direction of the first flow." Such positioning of the first of one or more feed openings at or after the front edge of the form parts begins to generate a more turbulent flow prior to the introduction of the second flow, such that the mixture of the second flow with the first flow is improved. Such an improvement is not disclosed or suggested in the Fredriksson '165 patent, which requires the port 18 to be positioned before the front edge of the modules because of the interchangeable and/or adjustable nature of the modules. The Fredriksson '165 patent distinguishes between the combining chamber 17 that comprises the feed opening and the mixing zone 13 that comprises the modules. The Fredriksson '165 patent also discloses that the combining chamber 17 is separated from the mixing zone 13 by the passage 12. Accordingly, amended Claim 6 is not anticipated by the Fredriksson '165 patent, and original Claims 7-8 and 11-12, which depend from Claim 6, also include the amended recitation that "the first of the one or more feed openings for supplying the second flow being located at or after a front edge of the first form part in the direction of the first flow."

Therefore, amended Claim 6 and original Claims 7-8 and 11-12 are not anticipated by the Fredriksson '165 patent. Accordingly, Applicants respectfully submit that the rejection of Claims 6-8 and 11-12 should be withdrawn.

Allowable Subject Matter

Applicants would like to thank the Examiner for indicating that Claims 9-10 would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims. Applicants respectfully believe, however, that independent Claim 6, from which those claims depend, is allowable for the reasons set forth above. Accordingly, Applicants respectfully believe that Claims 9-10 are allowable in that they contain additional recitations beyond independent Claim 6, and request that the objection be withdrawn.

Amendments to Claims 6, 13, and 15

Applicants have also amended Independent Claims 6 and 13 to more distinctly define the inner surface of the mixing zone. The amendments more clearly distinguish the inner periphery of the tube from the inner surface of the mixing zone. In addition, an "an" has been added to the introduction of the "inner periphery" in Claims 6 and 13. Accordingly, Applicants respectfully submit that these amendments directed to the inner surface of the mixing zone do not affect the scope of the claims and that Claims 6-16 of the present application are in condition for allowance. Furthermore, Applicants respectfully submit that the amendment to Claim 15 for feeding equipment, as opposed to mixing equipment, also does not affect the scope of the claims.

Additional Claims 17-20

Applicants have also added new independent Claim 17, as well as new Claims 18-20 that depend therefrom. Independent Claim 17 recites "at least one of the feed openings for supplying the second flow being located in at least one of the control surfaces of at least one form part." The new claims are supported by at least Figure 3 and the discussion of Figure 3 in the specification at page 7, lines 11-16. The prior art does not disclose such a feed opening located in a control surface of a form part. Accordingly, Applicants respectfully submit that new Claims 17-20 are allowable in that they contain additional recitations beyond the prior art.

CONCLUSION

In view of the foregoing remarks, Applicants respectfully submit that all of the claims of the present application are in condition for allowance. It is respectfully requested that a Notice of Allowance be issued in due course. Examiner Halpern is encouraged to contact Applicants' undersigned attorney to resolve any remaining issues in order to expedite examination of the present application.

A two-month extension is required for the filing of this response, and a check for $420.00 is hereby enclosed. In the event that additional extensions of time or fees for net addition of claims are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fees required are hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on March 22, 2004.

Sheila Hayes

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Date Mailed: 2/19/02
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Kindly acknowledge receipt of the accompanying UTILITY PATENT APPLICATION with Application Transmittal Cover Sheet for:

Inventor(s): Lamminen, et al.

Title of Invention: ARRANGEMENT FOR MIXING FLOWS IN PAPERMAKING PROCESS

Pages of Spec. (including claims and abstract) 15; No. of Claims 16

No. of Drawing Sheets 4 ; English Translation of Priority Document

Check(s) Enclosed $1,146.00

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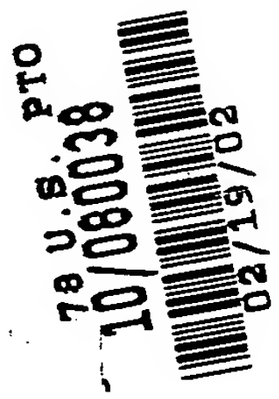

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